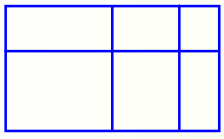
Precalc Warm Up # 9-5

Factor with integers:

1) $250 - 54x^3$ 2) $45 - 20x^4$

3) 2400 feet of fencing to enclose the garden areas shown. Find the outer dimensions that maximize the total area.



HW Questions: p. 246

27. Use synthetic division to determine if the given x is a zero.

$f(x) = 2x^3 + 3x^2 - 20x - 21$

a) $x = 4$
b) $x = -1$
c) $x = -\frac{7}{2}$
d) $x = 0$

2	3	-20	-21
	2		

r=0 if the x is a zero

51. Find all the zeros. $f(x) = 6x^3 - 5x^2 + 24x - 20$

$x^2(6x-5) + 4(6x-5)$ zeros: $\frac{5}{6}, \pm 2i$

$(6x-5)(x^2+4) = 0$

p. 219

43 $\frac{4}{4-5i} \cdot \frac{4+5i}{4+5i}$

standard form $a + bi$

$\frac{16+20i}{(4)^2-(5i)^2}$

$\frac{16+20i}{16-25i^2}$

$\frac{16+20i}{16+25}$

$\frac{16}{41} + \frac{20}{41}i$:)

HW: SL book

Read examples 8.1 - 8.4 on p. 241-242

do p. 244 #1 - 14